

CLAIMS

What is claimed is:

1. A method for operating a user equipment (UE) employing a CDMA technique, the method comprising:
 - (a) combining a plurality of spread spectrum data signals into a combined signal having a fluctuating power level corresponding to the data signals;
 - (b) modulating the combined signal to produce an RF signal;
 - (c) measuring average power of the combined signal over a selected time period;
 - (d) adaptively limiting the combined signal power to a calculated level based at least in part on said measured power; and
 - (e) transmitting the RF signal.
2. The method of claim 1 wherein step (c) further includes measuring average power of the RF signal over a selected time period.
3. The method of claim 1 further comprising amplifying the RF signal prior to transmission.
4. The method of claim 3 wherein step (c) further includes measuring average power of the amplified RF signal over the selected time period.
5. The method of claim 1 wherein step (c) further includes measuring power based on a variance of the combined signal.
6. The method of claim 1 wherein step (c) further includes measuring power based on a standard deviation of the combined signal.

7. The method of claim 1 wherein step (d) is omitted when a given number of active users is present.

8. The method of claim 1 wherein step (c) is omitted in response to a transmission of short codes.

9. The method of claim 1 further comprising:
amplifying the RF signal by a gain factor prior to transmission; and
adjusting the gain factor in response to the calculated power level and predetermined gain characteristics of the amplifier.

10. A method for operating a user equipment (UE) comprising:
(a) combining a plurality of spread spectrum signals into a combined signal;
(b) modulating the combined signal to produce an RF signal;
(c) measuring average power of the combined signal over a selected time period;
(d) adaptively limiting the combined signal power to a calculated level based at least in part on said measured power; and
(e) transmitting the RF signal.

11. The method of claim 10 wherein step (c) further includes measuring average power of the RF signal over a selected time period.

12. The method of claim 10 further comprising amplifying the RF signal prior to transmission.

13. The method of claim 12 wherein step (c) further includes measuring average power of the amplified RF signal over the selected time period.

14. The method of claim 10 wherein step (c) further includes measuring power based on a variance of the combined signal.

15. The method of claim 10 wherein step (c) further includes measuring power based on a standard deviation of the combined signal.

16. The method of claim 10 wherein step (d) is omitted when a given number of active users is present.

17. A method for operating a user equipment (UE) employing a CDMA technique, the method comprising:

- (a) combining a plurality of spread spectrum data signals into a combined signal having a fluctuating power level corresponding to the data signals;
- (b) modulating the combined signal to produce an RF signal;
- (c) measuring the power of the combined signal over a selected time period;
- (d) adaptively limiting the combined signal power to a selected level based at least in part on said measured power; and
- (e) transmitting the RF signal.